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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/706,749 | 11/12/2003 | Hitoshi Furuya | CU-3447 RJS | 7555 |

26530 7590 07/25/2006

LADAS & PARRY LLP
224 SOUTH MICHIGAN AVENUE
SUITE 1600
CHICAGO, IL 60604

| EXAMINER | |
|---|---|
| KAYRISH, MATTHEW | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2627 | |

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/706,749 | FURUYA ET AL. | |
| | Examiner | Art Unit | |
| | Matthew G. Kayrish | 2627 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US Patent Number 6044057), in view of Kim et al (US Publication Number 2001/0012261).

Regarding claim 1, Park et al disclose:

A disk apparatus comprising:

A head that reads information from a disk (figure 5, item 320);

A guiding rod that movably supports and guides the head (figure 5, items 501 & 502); and

A height adjustment portion that is rotatably formed on a base for adjusting the height of the guiding rod (figure 5, item 360), wherein the height adjustment portion includes a height adjustment cam for sandwiching the guiding rod (See figure 10).

Wherein the height adjustment cam includes first (figure 10, item 365) and second flange portions (figure 10, item 362), wherein the distance between the first and second flange portions is constant (column 6, lines 17-23).

Park et al fails to specifically disclose:

A height adjustment cam wherein the first and second flange portions partly encompass the height adjustment portion in a circumferential direction of the height adjustment portion.

Kim et al disclose:

A height adjustment cam wherein the first and second flange portions (figure 3, flange-like portions of the adjustment cam [210] are arrange above and below the height adjustment groove) partly encompass the height adjustment portion in a circumferential direction of the height adjustment portion (figure 3, flange-like portions above and below the height adjustment portions only encircle the height adjustment cam approximately half of the way around).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Park et al with flange portions with end portions that only encircle about half of the adjustment cam, as taught by Kim et al, because, if the adjustment groove portion, then there can be a physical barrier at the end portions of the cam portion. This will provide an abutment at the end portions of the height adjustment groove. Thereby, the height adjustment cam can only be rotated a given amount. The adjustment is prevented from coming too close to the disc, which can scratch the disc, or too far away from the disc, in which the optical head cannot focus.

Regarding claim 2, Park et al disclose:

The disk apparatus as claimed in claim 1, wherein when the height adjustment portion is rotated where the guiding rod is sandwiched by the height adjustment cam

(column 6, lines 17-23), the height of the guiding rod is adjusted while the guiding rod is restrained by the height adjustment cam (column 6, lines 39-43).

Regarding claim 3, Park et al disclose:

The disk apparatus as claimed in claim 1, wherein the height adjustment portion is shaped as a circular cylinder (figure 10, item 360).

Regarding claim 4, Park et al, in view of Kim et al fail to specifically disclose the process limitation:

The disk apparatus as claimed in claim 1, wherein the height adjustment portion is formed by outsert molding.

However, a "product by process" claim is directed to the product per se, no matter how actually made, see In re Hirao, 190 USPQ 15 at 17 (footnote 3, CCPA, 5/27/76); In re Brown, 173 USPQ 685 (CCPA 5/18/72); In re Luck, 177 USPQ 523 (CCPA, 4/26/73); In re Fessmann, 180 USPQ 324 (CCPA, 1/10/74); In re Thorpe, 227 USPQ 964 (CAFC, 11/21/85). The patentability of the final product in a "product by process" claim must be determined by the product itself and not the actual process and an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Park et al. fails to disclose the product limitations, however, it would have been obvious to make the optical pickup device taught by Park et al by a myriad of processes to achieve the same final product.

Regarding claim 5, Park et al disclose

The disk apparatus as claimed in claim 1, wherein no height adjustment cam is formed at a prescribed peripheral area of the height adjustment portion (See figure 5).

Regarding claim 6, Park et al disclose:

The disk apparatus as claimed in claim 1, wherein the height adjustment cam sandwiches the guiding rod at an end portion of the guiding rod (See figure 10).

Regarding claim 7, Park et al disclose

The disk apparatus as claimed in claim 6, wherein the end portion of the guiding rod has an end surface that is engaged to a bottom surface of the height adjustment cam (column 6, lines 39-43).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew G. Kayrish 7/14/2006

MK

7/14/2006

ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER